

from the default maximum quality score. In other examples, each quality parameter may have an associated numerical subscore, with the various subscores being added together to give the overall quality score. The various quality parameters may be normalized or weighted in any suitable way. In some examples, this weighting may be dynamically changed over time—e.g., based on user feedback and/or the perceived importance of a given parameter to overall meeting quality. This can be used to address the fact that some quality parameters may be linked—for example, an “average attentiveness” quality parameter may be linked with air temperature and quality, in that it is harder to pay attention to the meeting when the meeting environment is uncomfortable.

**[0034]** Additionally, or alternatively, a single meeting may have numerous quality scores, each focused on a different facet of the meeting experience. For example, one quality score may reflect the perceived comfort of the meeting environment (e.g., based on air temperature, quality, noise level), while another quality score reflects the timeliness of the meeting (e.g., starting/ending on time, whether participants arrived on time), and yet another reflects the productivity level of the meeting (e.g., whether stated objectives were reached, whether participants stayed on topic, whether all participants contributed). This can be used to further discern the relationship between various quality parameters and overall meeting quality. For instance, if a meeting is observed to be unproductive, and yet took place in a relatively comfortable environment, then it may be inferred that the time-of-day or specific mix of meeting participants had a larger effect on overall meeting quality.

**[0035]** When quality parameters and overall quality scores for historical meetings are known, the insight generation machine may identify trends useable to predict the overall quality of future meetings. For example, a user may attempt to schedule a new meeting including multiple participants in a relatively small room during the hottest time of day. Based on analysis of historical meetings, the insight generation machine may conclude that the meeting is likely to be uncomfortably cramped, suffer from high temperature and poor air quality, and therefore result in a low-quality meeting. As a result, the insight generation machine may recommend to the user that they change some aspect of the meeting to improve the predicted quality score. For example, the user may be prompted to reduce the number of participants, change the meeting time, change the meeting location, etc.

**[0036]** In general, an insight may be generated to address any quality parameter that is predicted to be non-optimal for a future meeting. For example, meeting insights may include recommendations based on air temperature, air quality, noise level, brightness level, location size, time-of-day, day-of-week, season, number of invited participants, identities/roles of specific participants, proximity to other meetings, commute times for invited participants, workload/availability of invited participants, etc.

**[0037]** As a specific example, the meeting insight may indicate that the meeting location is too large or small given a quantity of the one or more meeting participants, and provide a recommendation to move the upcoming meeting to a different location (i.e., one of more appropriate size). Similarly, the meeting insight may indicate that the meeting location is in close proximity to a disruptive source of noise (e.g., construction), and may provide a recommendation to move the upcoming meeting to a quieter meeting location.

Another example meeting insight may indicate that meetings taking place at the scheduled meeting time of the upcoming meeting have relatively low quality scores and recommend changing the meeting time. Furthermore, the meeting insight may indicate that previously-elapsed meetings having a similar meeting topic to the upcoming meeting tended to include one or more specific meeting participants. The meeting insight may therefore include a recommendation to invite the specific meeting participants to the upcoming meeting.

**[0038]** In many cases, the recommendation included in the meeting insight may simply be a recommendation, meaning the user can decide whether the recommendation should be implemented, then manually do so. Additionally, or alternatively, the meeting insight computing system may be configured to automatically implement the recommendation to improve meeting quality. For example, the meeting insight computing system may be configured to automatically take actions aimed at improving meeting quality with or without prompting the user and with or without regard to user input. Such automatic actions may include, for instance, adjusting operation of a building’s HVAC system or lighting system during the meeting, or automatically notifying specific individuals that a meeting is about to occur that may benefit from their presence.

**[0039]** Though meeting insights are generally described herein as applying to meetings having multiple participants, the meeting insight computing system may in some cases generate insights for only a single user. For instance, an individual may work in various different environments or workspaces over a period of time (e.g., day, week), and receive meeting insights indicating which workspace was most productive, which of their personal devices caused distractions, etc.

**[0040]** FIG. 4 illustrates an example user interface 400 generated by the scheduling interface of the meeting insight computing system. As shown, the scheduling interface has been used to schedule a meeting 402. Meeting 402 takes place at a specific time 404 (i.e., 2 PM to 4 PM), at a specific location 406 (i.e., conference room C), and includes specific participants 408 (i.e., users 2, 3, 4, and 7). Furthermore, user interface 400 is shown displaying a meeting insight 410 generated by the meeting insight generation machine. Meeting insight 410 indicates that the conference room tends to be hot at the scheduled meeting time and recommends that the user consider changing the meeting location.

**[0041]** It will be understood that the specific interface 400 shown in FIG. 4, as well as the meeting insight 410, are non-limiting examples.

**[0042]** Alternative user interfaces may include any suitable information and meeting insights and may use any suitable layout.

**[0043]** Returning briefly to FIG. 3, meeting insight computing system 300 also includes a meeting trends reporting machine configured to, based on the plurality of quality parameters, report meeting trends to individuals in an organization. For example, one or more of the meeting trends may specify times-of-day and meeting locations correlated with meetings having high quality scores. In other words, the meeting trends reporting machine may constitute a workplace analytics service useable by managers, human resources workers, individual users, etc., to gain information about which conference rooms are most productive, the